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## ORIGINAL ARTICLES.

### CASE OF CATARACT RESULTING FROM LIGHTNING STROKE.

By L. R. CULBERTSON, M.D.,  
ZANESVILLE, OHIO.

Mrs. G. G. H., aged 21, was referred to me by Dr. J. H. Wright, August 13, 1909.

Stated that while telephoning to Dr. Wright, about seven weeks previously, lightning struck the phone and knocked her down, becoming unconscious a short time. On recovering consciousness, her left eye was greatly inflamed. Her family physician treated it for a while.

When she first consulted me, I found intense irido-cyclitis in the left eye. V. each eye about 5/5; Tn in both. Is pregnant three months—about five weeks at time of stroke.

I prescribed atropia, dionin and hot fomentations. Her physician carried out the treatment. She returned to me March 23, 1910, blind in the left eye from soft cataract and nearly blind in the right eye from cataract. Urine was normal. Is nursing her baby. It is interesting to note that her baby's left ear is smaller than its right ear. Whether this is due to the effect of the shock on the mother, or whether a coincidence, I cannot say.

On October 23, 1912, at the Good Samaritan Hospital I did a combined linear extraction on L.E. She was then nursing another baby.

In December, 1912, I fitted her for glasses L.E.V. Rem. was +9. sp.  $\odot$  +3.5 cy. 95=3/7.5. Prox. +14. sp.  $\odot$  +3.5 cy. 95=1.25/.30 Sn.

## TRANSLATIONS.

### ON THE EPISCLERITIC PROCESS AND ITS SEQUELÆ.\*

BY DR. H. PAGENSTECHER,  
WIESBADEN, GERMANY.

Translated by Adolf Alt, M.D.

It is a well-known fact that various affections of the eye are cured or favorably influenced by the use of the Wiesbaden hot springs. First among these are the affections of the iris due to a rheumatic or gouty diathesis, of the mucous membranes and of the muscular apparatus. Aside from these affections on account of which yearly many patients seek and find a cure here, there is another eye affection which, too, is in certain stages favorably influenced by the Wiesbaden waters; I mean the chronic episcleritis.

It does not seem unimportant to point this out in a few lines, since this eye affection is one of the most refractory and leads to serious consequences, and since our usual treatment in this disease has hitherto sometimes failed us altogether. In such cases we must not overlook any remedy which may aid a cure.

It is not easy to give a concise description of the episcleritic process, since we have to deal with a many-sided affection of the eye, and since its different stages may resemble each other so little that one might hardly believe that the same disease could be their basis.

Usually the affection develops from very slight, insidious inflammatory symptoms which appear in the sclerotic generally, at first near the cornea, sometimes nearer the æquator bulbi. When the slight injection of the conjunctiva bulbi lies near the cornea it is possible to mistake it for a purely pustulous affection. In such cases the action of the 2½ per cent. or 5 per cent. yellow oxide of mercury ointment will quickly clear the diagnosis, since the purely pustulous affections will usually heal in a few days under the influence of this remedy. When the episcleritic process appears more peripherally, that is in the parts of the sclerotic which are closer to the æquator, it is mostly characterized by a sector-shaped deep injection of the bulbar conjunctiva, often

\*From the Aertzliche Festschrift zur Eroeffnung des Staedtischen Kaiser Friedrich Bades in Wiesbaden, 1913.

with a slight swelling. This is best seen when the patient turns the eyeball to the side opposite to the diseased part and when at the same time the lids are drawn away from the eyeball. Such parts are as a rule painful on pressure, and that is what leads the patient to the oculist. At this stage the affection may spontaneously disappear; in other cases large doses of aspirin and moist applications may often aid in an astonishing manner. Yet, it would be foolish to expect that in this way the disease is cured once and for all time. The disposition is present in the body and it may again and again after months, even years, reappear, often without known cause, sometimes after taking a cold. If the first attack does not yield to aspirin, and if the process is not energetically dealt with, the injection of the conjunctiva increases, a thickening of the sclerotic becomes plainly visible, on which hump-like, thick nodules may develop, which are sometimes very painful on pressure; sometimes, however, cause no sensation whatever. At this stage the affection may remain stationary for a long time without any impairment of the function of the eye. It may, also, disappear spontaneously, and return again. When the thickening of the sclerotic had been present for a continued period, a dark discoloration of the sclerotic results, which remains behind. This symptom often aids in making a correct diagnosis in the later stages of the affection, when the episcleritic process itself is more in the background and the sequelæ become apparent. If the disease progresses, primarily the cornea becomes affected, and usually by a parenchymatous opacity which starts from the corneal margin. Such an opacity, which not infrequently grows into the central parts of the cornea, causes visual disturbances of varying degree. Sometimes these opacities are of an evanescent character; that is, they may disappear comparatively quickly and reappear at the next attack at another or even the same place. In most cases, however, when the opacities had reached a high degree, even after the total extinction of the process, dense parenchymatous corneal opacities remain behind, which seem to submit to no treatment and are stationary.

In the further stages of the disease the iris, also, may be affected. An exudative iritis is set up with posterior synechiæ of a very torpid nature. It is very rare in this form of iritis to see deposits on Descemet's membrane. After a prolonged iritis the lens may become affected, either through exudative deposits on the anterior lens capsule or through opacities in the anterior

corticalis and at the æquator, which in time may lead to cataract formation. When in later stages of the disease the pathological symptoms in the sclerotic appear together with corneal opacities and the inflammatory alterations in the iris, the picture resembles exactly that of a beginning scleral staphyloma. If in such cases the intraocular tension is increased, it may happen that really a true scleral staphyloma results.

As a rule, the process remains confined to the anterior part of the bulbus. Exudations into the vitreous body are relatively rare.

This process may drag along for years and decades with shorter or longer relatively free intervals, if it cannot be brought under control through proper treatment. During the whole course of the affection variations of the intraocular pressure are very frequently observed. Rarely do they reach such a degree that an antiphlogistic operation is called for. More frequently we find during the course of it a pronounced hypotonus which may sometimes reach such a degree that the refraction is materially altered.

The affection is hardly ever found in juvenile individuals. Cases in persons under 25 years are extremely rare. It is observed most frequently between the twenty-fifth and the fortieth years.

As ætiological factors, colds, rheumatic and gouty diatheses are mentioned the oftenest. According to my observations there are undoubtedly cases which are due to these causes; but it seems to me that congenital lues is the most frequent cause. The typical chronic episcleritis is, as a rule, a late symptom of congenital lues. Acquired lues may bring about a gummatous affection of the sclerotic in its anterior parts and this may look exactly like an episcleritis with formation of nodules, yet in its character and course it is an absolutely different affection.

It seems that examinations of the blood, especially the Wassermann's test, have as yet not been made in these cases. I have had no occasion thus far to make such examinations, but I intend to study this question more thoroughly in the future. My observations are based solely on ætiological researches where they were possible.

The treatment of episcleritis is shaped primarily according to the causal affections, and secondarily according to the stage at which the case is seen. In lighter cases, which are probably on a rheumatic basis, aspirin with moist hot application is usually

very effective, and we see such cases not infrequently cured by this therapy with astonishing rapidity. Especially in such light cases, particularly if other rheumatic symptoms coexist, the Wiesbaden thermal baths have a very beneficial influence, so that in some cases the affection is healed for ever. Unfortunately, however, such cases are rare. As a rule, the episcleritic process returns sooner or later, often after colds, riding against the cold wind, oftener, however, without any known cause. If during such relapses a thickening of the sclerotic with yellowish nodules takes place, usually all the antirheumatic and antigouty remedies fail us. In such cases the use of iodine preparations, potassium or sodium iodide, given internally in large doses are in place. Sometimes these remedies exert a really miraculous effect, especially when the formation of nodules in the sclerotic has reached a high degree. When the affection has reached a further stage, and the cornea shows a parenchymatous opacity and the iris a chronic inflammatory process, frequently enough even this medication is without effect and we are forced to employ continued energetic mercurial inunctions and diaphoresis. I should like to lay especial emphasis on the cotemporaneous diaphoresis in combination with the inunctions, since I have found that with this method in these processes we obtain our aim incomparably quicker than by employing one of these agents alone or even one after the other. This treatment is enhanced in its effect by hot electric applications and mydriasis, especially when the intraocular tension is below the norm. In a few of such cases I have made an observation which I must not omit. It concerned cases of severest episcleritis with great nodule formation, secondary affection of the cornea and usually of the iris, also. The patients had taken iodides even in large doses without success; I therefore ceased the iodides and ordered an inunction cure with diaphoresis. Against my expectations, this, too remained useless and showed but a slight effect on the disease process. When, however, at the end of the inunction and diaphoresis cure I returned to large doses of iodides the result was an astonishingly good one. It seems, therefore, that there are cases which must be rendered susceptible to the beneficent influence of the iodides by a previous inunction and sweat-cure. In order to be effective finally the iodide preparations must in many cases be continued for a long time, for many months. They are best given internally when they are well borne. If that cannot be done we have a good supplement in the 10 per cent. or 20 per

cent. iothion ointment. This is usually well borne and can be used for a long time.

When the episcleritic process has run its course and, as is usually the case, more or less dense parenchymatous opacities have been formed in the cornea, which impair vision to a marked degree, an optical iridectomy may have to be considered. We must, however, be very circumspect in this question, because in these cases the success as to the improvement of vision quite frequently does not come up to our expectations. It may, also, happen that a year later the part of the cornea in front of the coloboma is opaque and the remainder of the cornea has become clearer, for these opacities are often very variable. It is wise not to proceed to an operation until after repeated inunction- and sweat-cures, and after a prolonged observation has led to the conviction that the inflammatory process has absolutely come to an end. Under those conditions we note in many cases very good results concerning vision, especially when the lens has remained perfectly clear, although the pupillary area is filled with a dense membrane. If, however, the lens is opaque, also, we must, when the cataract formation has reached a certain degree, add the extraction of the lens, which usually promises a good prognosis, since even after an existence of years this process does not lead to opacities in the vitreous, and retina and optic nerve remain intact.

As stated above, the effect of the Wiesbaden thermal waters—as a bathing or drinking cure—is extremely favorable, together with antirheumatic and antigouty remedies, in slight degrees of episcleritis. In the severe cases which are accompanied by more or less nodule formation, and the other conditions detailed above, inunction- and sweat-cures and the use of large doses of iodides must in the main be relied on. A specific action of the Wiesbaden thermal waters is out of question. Yet, I believe myself to have become convinced that in such cases, too, the use of a bathing or drinking cure at this place, when following an inunction cure or between two such cures, may influence the course of the disease favorably.



## SCLERITIS AND PODAGRA.\*

BY DR. D. W. P. KALASCHNIKOW.

Translated by Adolf Alt, M.D.

Experiences made during the last years concerning the affection of the sclerotic induce me to remind oculists of the opinion of Th. Panas who from its construction compared the eye with enarthroses, like the hip joint, where the eye would represent the caput femoris, and Tenon's capsule the trochlea.

This anatomico-physiological analogy in my opinion enables us to explain the ætiology as well as the methods of treatment of diseases of the sclerotic, which in its structure represents a tendinous tissue and may be looked upon as a part of the "eye-joint."

In fact the sclerotic is subject to the same diseases as are the joints and, according to my experience, demands the same treatment as these. Like a joint, the sclerotic is most frequently attacked by the so-called rheumatic affections. Syphilis and tuberculosis affect it much more rarely. Acute articular rheumatism, a disease *sui generis*, an infectious disease, causes in the eye inflammation of Tenon's capsule (according to Panas, a hydrarthrosis oculi) and is accompanied by an increase in temperature; chronic articular rheumatism, which at present is and by right generally viewed as an arthritis urica, in the eye causes scleritis (scleritis urica).

We oculists must join the surgeons and do away with the name "chronic rheumatic affections," since such a general affection of the whole organism does not exist and such a designation in the vast majority of the cases simply serves as a useful cover behind which the physician hides when he is unable to make a clear diagnosis. It is therefore not permissible to speak of rheumatic scleritis (as due to such a systemic disease), since the largest number of such cases take their origin from the same podagra, which at first and most frequently attacks the joints as well as the sclerotic.

In affections of the sclerotic we must, therefore, above everything treat the podagra. The long drawn out course of these affections, their obstinacy towards our treatment, our helplessness, which is so disconsolately spoken of in both old and recent text-books, are accounted for by the fact that the true cause of the disease, the podagra, is not thought of and not properly treated. All sorts of remedies have been used including gen-

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\*Centrbl. f. pr. Augenhlk., July, 1913.

eral mercurial inunctions, and this without sufficient indications, while as most trustworthy remedies for the treatment of scleritis, above all, the anti-podagric ones should be considered, like piperazin, atophan, urodonal, urosin, etc., of course in conjunction with mineral waters, baths and diet.

In analogy between the joint and its tendinous parts, the sclerotic, demands also the same local treatment. With great irritation, as in exacerbations of the process, the same permanent warm wrappings, rest and immobilization as of the joint are required. When the inflammatory process recedes the same massage comes into place, just as with joint affections, first with bland ointments, then with more and more irritating ones; finally with ichthyol, mercurial and iodine ointments (pure iodine). Further it is necessary to ease the circulation of the blood and the circulation of the products of metabolism in the lymph channels between the avascular cornea, the almost avascular sclerotic, and the anterior chamber through Schlemm's canal. This cannot be done with atropin, which, aside from increasing the intraocular pressure and thus constricting the diseased tissues, compresses Schlemm's canal itself and plugs it with iris. Here, on the contrary, eserine and pilocarpin are demanded.

In all of my observations I have used eserine or pilocarpin in the shape of ointments instead of atropin, the employment of which is justified only by the danger of synechia and which has generally been applied without benefit. The miotics act by reducing the intraocular pressure, by aiding the circulation in Schlemm's canal, and by increasing the absorbing surface of the iris, which in this disease is of the greatest importance and must necessarily help to a quicker and better absorption and elimination of the inflammatory products.

I believe even to be permitted to state, that scleritis is so often due to podagra that it may be looked upon as one of the symptoms of podagra which might serve the internists for diagnostic purposes in difficult cases, in which the analysis of the urine fails to give sufficient data for the confirmation of the "podagric state" of the patient. We must point out that severe cases of podagric scleritis go hand in hand with severe forms of general podagra. In consequence such cases demand treatment contemporaneously from the oculist and the internist, just like diseases of the heart and kidneys demand the observation and treatment of a specialist.

Finally, I think I must say that in all cases I have observed, even the severest ones, such a joint-treatment was perfectly successful.



## OPTIC MENINGITIS IN RECENT SYPHILIS.\*

By DR. F. DE LAPERSONNE,  
PARIS.

Translated by Adolf Alt, M.D.

Among the ocular manifestations of syphilis optic neuritis without extension into the retina and choroid has been the object of numerous and interesting studies. May it suffice to mention the beautiful researches of Professor Uhthoff (1900) in which among 253 cases of neuritis of infectious origin he found 51 due to acquired and 10 to hereditary syphilis. Dufour and Gonin in their article in the *Encyclopédie Française d'Ophthalmologie* divide these neuritis cases into early and late ones.

The early optic neuritis appears very soon after the primary lesion. Groenouw has seen it six weeks after the healing of the chancre; Soemiskiewitch between the first and fifth month. In the observations which I have made and in which the primary lesion could be definitely determined the neuritis appeared in the third, fifth and seventh month.

It is frequently one-sided in character and may be accompanied by the other mucous or cutaneous lesions of the so-called secondary period. The clinical picture shows nothing specially characteristic and the ophthalmoscopic picture does not suffice to make a diagnosis. Among thirty cases of neuritis in which syphilis had been acknowledged, Smith saw fourteen of papillitis, seventeen of neuroretinitis and three of retrobulbar neuritis.

In the cases which I have observed there was particularly an oedematous neuritis and once a papillitis. I have not observed the stage of light hyperæmia of the papilla in recent syphilis, as has been described by others.

This neuritis may heal completely without leaving a trace appreciable, even with the ophthalmoscope; most frequently the picture of a postneuritic atrophy remains behind with a white papilla with irregular margin, pigment deposits and broad veins, and the functional disturbance seems to be without relation to the lesions seen with the ophthalmoscope.

In order to explain the early appearance of these lesions, their different clinical aspects and their varying prognosis, it is certain that the idea of a parenchymatous or interstitial neuritis is no longer satisfactory; another explanation is now more and more

\*Arch. d'Ophthalm., August, 1913.

accepted, that of an optic meningitis. The sheaths of the optic nerve, especially the arachnoid, are primarily affected and the cellular infiltration by means of the pia mater penetrates into the interfascicular spaces of the optic nerve the fibres of which are secondarily altered.

Several years ago Pierre Marie and Léri have tried to prove that all syphilitic lesions ending in atrophy of the papilla and blindness, especially in the course of tabes, are due to a chronic meningitis of the optic nerve. Bourdise in an excellent thesis has studied optic meningitis in a great many cases of acute and chronic infections and especially in syphilis.

This idea is beginning to become general in neurology. Vincent maintains that no syphilitic neuritis develops without meningitis, whether in tabes or general paralysis, or meningomyelitis, whether it produces the Argyll Robertson pupil, ocular paresis or transitory hemiplegia.

As regards the visual apparatus, the proof is furnished by the lymphocytosis of the cerebro-spinal fluid. In 1903, more than ten years ago, I have, as one of the first, I believe, shown "that lymphocytosis is present in the development of syphilitic affections of the retina and optic nerve and that it disappears in the retrogressive period"; and Professor Widai, in view of my communication, stated that the lymphocytosis is the more intense the more recent the cutaneous or ocular lesions. The importance attached to the cytology of the cerebrospinal fluid in ocular syphilis is now well known; it is no longer simply interesting on account of the great proportion of polynuclear cells in comparison with the lymphocytes.

Although there was rarely an occasion to furnish the anatomical proofs, they have been given us in Uhthoff's paper. He notes in one case "a very intense inflammatory process characterized by the swelling of the pia mater sheath, by newformation of bloodvessels and a great cellular infiltration"; and in another "the formation of intervaginal exudates and the production of a symphysis with fibrous formation which almost totally compressed the central vein." Does not the anatomical process found in optic meningitis, instead of being secondary, precede the lesions of the nerve?

The optic meningitis being admitted, it is easily comprehended that in descending neuritis it does not affect the whole nerve from the canalis opticus to the entrance into the eyeball to the same degree. These differences in localization explain the variety

of clinical symptoms, as retrobulbar neuritis, œdematous neuritis or papillitis. They explain also the possibility of a favorable prognosis as we can employ energetic treatment from the beginning of the arachnoido-pia mater inflammation, when the cellular infiltration has not penetrated deeply into the nerve and the interstitial exudations have not yet had time to alter the optic nerve fibres. It is therefore necessary that, although the functional disturbance may attract little attention, the diagnosis is made as quickly as possible by means of the ophthalmoscopic signs and by the Wassermann test made with the blood and with the cerebrospinal fluid. Then an energetic treatment can be instituted.

In a general way my method of treating cases of ocular syphilis is the following:

(1) *Weak treatment.*—In cases in the retrogressive stage, tabetic atrophies, chorioretinitis and old iridochoroiditis I make intramuscular injections in the place of choice above the linea trochanterica of sublimate oil, consisting of 10 centigrammes of bichloride of mercury and 10 grammes of sterile olive oil, put up in ampules containing one cubic centimeter. The injections are made every second day in a series of twenty to thirty.

When intramuscular injections are not possible for various reasons, I order inunctions of four grammes of Neapolitan ointment, watching with the greatest care the condition of the gums and giving at the same time iodine preparations. I have absolutely abandoned the use of mercury pills or solutions.

(2) *Intensive treatment.*—In most cases of ocular and cerebral syphilis I give intravenous injections of cyanide of mercury in series of twelve to fifteen every other day, using 10 centigrammes of mercuric cyanide in sterile water 10 grammes, put up in ampules of a cubic centimeter. This series is followed by intravenous injections of salvarsan when the kidneys are found to be healthy. We employ twenty-five to thirty-five centigrammes of salvarsan, or from thirty to forty centigrammes of neosalvarsan, in twenty cubic centimetres of sterile water, freshly prepared. Three or four intravenous injections are made in intervals of a week; then we begin again with a series of twelve intravenous injections of cyanide of mercury.

(3) If, however, the action must be even more rapid, as in the cases of very early optic meningitis, it is better to begin with the salvarsan injections. We make three or four injections of the strength above mentioned with weekly intervals. The arsenobenzol acts very rapidly in cutaneous eruptions, in iritis and in.

certain forms of cyclo-iridic gummata. But at once after this we begin a series of twelve intravenous injections of cyanide of mercury, for I am convinced that only the association of the two remedies gives us rapid and lasting results.

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#### OBITUARY.

DR. D. W. GREENE, 1951 to 1913.

Dr. Duff W. Greene died suddenly at Dayton, Ohio, on August 17th. Born in 1851, he was only 62 years old. His unexpected demise is a sad loss to American Ophthalmology. For many years at the head of the Eye Department of the National Military Home and St. Elizabeth's Hospital at Dayton, he had made a name for himself as a successful practitioner, an energetic worker and skillful operator, when the Smith cataract extraction method exerted a special fascination on him. Having performed this operation on numerous patients, he finally went to India and remained several months with Major Smith, observing his cases and operating under his personal direction. After his return he was the chief exponent of this method by word and deed in the United States.

Personally Dr. Greene was a most lovable character, always friendly and cheerful, full of the keenest interest in everything pertaining not only to Ophthalmology but to Medicine in general; a man whom it was a pleasure to know and a source of pride to be able to call friend. He, also, is one of our Immortals.

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Dr. Casey Wood has been appointed Professor of Ophthalmology and Head of the Department of Ophthalmology in the newly organized College of Medicine of the University of Illinois, the reorganized and former College of Physicians and Surgeons, Chicago.

# MEDICAL SOCIETIES

## OPHTHALMIC SECTION

OF THE ST. LOUIS MEDICAL SOCIETY.

Meeting of April 2, 1913.

[Continued]

*A Case of Foreign Body in the Eyeball.*—By Dr. E. H. Higbee.

There are times when even an oculist is in a quandary as to just what to do for a patient, and the following case clearly demonstrates this fact. I think a paper could be written upon this case entitled, "The Oculist's Dilemma," as you will see by the history.

The physician, in referring the patient to me, said, "I cannot diagnose his trouble as the result of an injury." When I first saw him I found some swelling of the lids, marked injection of the conjunctiva and sclera, and a complete synechia of the iris. Tension was minus; there was no marked tenderness on palpation of the globe; he did not complain of much pain, but this point is indefinite, he being a Greek and understanding very little English. I learned from him that he had been struck with a piece of hot rivet in the eye, about one month previous, and had been treated by a physician who seemed to think that his trouble was a specific one, as near as I could determine, evidently though he did not use atropine. I had an x-ray picture taken of the eye and this shows a foreign body 5 mm. below the horizontal plane, 5 mm. to the temporal side of the vertical plane and 4 mm. back of the center of the cornea. I advised him first to have the eye removed for the situation of the foreign body seems to show that it lies in the ciliary region. He refused to have the eye removed. Next I advised him to let me try to remove the foreign body. This he also refused to let me do. As near as I can determine, he has rich relations in Athens, who have advised him to have nothing done over here, but to come home and have the eye attended there.

Now my hands are tied, so to speak. I know what this man should have done, yet he refuses. I also feel that if he had had proper care in the start he might probably have been able to retain his eyeball (a very important factor with most people). Yet, I cannot do anything to eliminate faulty early treatment.



I expect to send a letter with him, to his oculist in Athens. Will he deliver the letter? Will the Athens physician believe what I tell him? So I say this is at least one of the oculist's dilemmas. To-day he told me he was hurt January 12th and he came to me February 3rd.

## DISCUSSION.

Dr. Shahan: I can recall a case similar to this in a boy 8 or 10 years of age. While he was playing with a tenpenny nail on the end of an elastic band, the nail got loose, flew back and struck him in the eye. The anterior chamber was filled with blood so that at first I could not gauge the extent of the injury. I thought probably an iridodialysis had occurred with hæmorrhage into the anterior chamber. I watched the eye from day to day and about the second or third day the blood cleared away very rapidly so that vision came up quite decidedly. About the fourth or fifth day the hæmorrhage was all gone except a small clot in the lower nasal quadrant. Following this, vision came up to normal. When the clot disappeared, a small cilium was found to have occupied the center of the anterior chamber. I observed the cilium for several months. It is still there, apparently doing no harm whatever.

I recall another patient who came from a clinic in considerable terror, having been advised there that his eye must be removed. He had been struck on the sclera by a piece of steel which had cut to the choroid but had not penetrated the globe.

His vision was very low, but under ordinary treatment the inflammation rapidly subsided, the hæmorrhage cleared away from the anterior chamber, his vision became about 20/30 and remained there.

Dr. Post: I would like to ask Dr. Higbee if he took any precaution so that this patient will not sue him for damages later on? Damage suits are now very rare, though at one time they were frequent. I recall a case where the advice was not taken to remove an eye; later, the other eye was lost and the doctor whose advice was ignored was sued for damages three times. I always feel that where I give advice to remove an eye and the patient rejects it, that I must take some special precaution to protect myself in case later on the patient should think it a good plan to try to get "some of the doctor's money".

Dr. Shoemaker: In connection with the injury of the cornea in this case of Dr. Higbee's, I would like to report a case, inter-

esting because of the marked change in the refraction following the injury. A case of a boy about 8 years of age who had been wearing a plus 0.5 D.s. prescribed by a competent oculist. He was playing with some other boys and had filled a bottle with water, corked it up and put it in a fire and watched developments. The thing exploded and a piece of glass struck him in the eye, producing a cut through the temporal half of the cornea and into the ciliary region. There was some prolapse of the iris but no iridectomy was done. It healed up very nicely with slight disfigurement of the pupil. There is not much astigmatism. He accepts no cylinder but does accept a plus 8. D. spherical which gives him 18/24+ vision. I cannot account for the change of refraction unless it is due to a change in the position of the lens.

Dr. F. Parker: In regard to Dr. Post's remarks on malpractice, I will say I had a patient referred from out of the city to me, suffering as he thought from a cold or conjunctivitis. Upon examination with x-ray, I found a foreign body in his eye and advised removal. It was objected to very seriously, and I was also threatened with a malpractice suit, which, had I not had the picture to prove my assertions, most likely would have occurred.

Dr. Higbee, in closing: In answer to Dr. Post, I have taken no special precaution in this case. These fellows have an interpreter, who is a very intelligent fellow, who explains to them that they are being properly cared for, and as a rule keeps them out of the hands of the lawyers, especially that class of lawyers that make blackmail their specialty. I think the x-ray picture combined with what I have told the man, also the testimony of those who have seen him, would be sufficient to convince a jury that I had told him the truth, and had also done all that could have been done under existing circumstances.

*Anterior Scleral Trephining in Glaucoma.*—By Dr. J. Ellis Jennings.

Since the introduction by Von Graefe of iridectomy as a cure for glaucoma, it has been the means of saving countless thousands of eyes from blindness. The experience of years, however, has taught us that while iridectomy insures a permanent cure in inflammatory glaucoma, it is of little or no value in about 50 per cent. of cases of chronic or simple glaucoma. Nevertheless iridectomy is the operation of choice even in simple glaucoma, with

the chances of success greater if the operation is undertaken in the early stages of the disease. When iridectomy fails to permanently reduce increased tension, other measures for its relief must be resorted to. First in importance is sclerotomy, introduced by De Wecker as a substitute for iridectomy on the assumption that the section in the sclera was of greater importance than the excision of the iris. He considered the significance of the scleral incision to lie in the fact that by means of it a cicatrix was introduced into the sclera, which allowed fluid to filter through it. It is now thought that the value of this operation is due to the deep incision cutting through the root of the iris, thus opening up drainage through the spaces of Fontana and the canal of Schlemm.

One of the newer operations for the relief of glaucoma which really does cause the formation of a cystoid scar, is trephining the sclera as advocated by Fergus and Elliott. In the 1911 year book Fergus says the operation has so far given entire satisfaction, but defers any attempt to estimate its value until he has had larger experience with it. Elliott has done 128 operations, the bulk of them under cocain anæsthesia, usually combined with adrenalin. In six operations some vitreous was lost; in five cases the trephine failed to enter the anterior chamber and a small curette had to be used. In sixty-five of the one hundred and twenty-eight operations the trephining was followed by removal of a portion of the iris; in fifty-seven a small peripheral iridectomy, and in the other eight a large complete iridectomy. In his later cases iridectomy has been less frequently demanded. Seventeen cases were examined after intervals of from thirty-seven days to one year. In all but one of them the filtration continued free and good. In this one it was doubtful but the tension remained normal. The technique of the operation is as follows: The first step is to make a large triangular flap of conjunctiva, beginning 10 mm. above the limbus and having it 7 mm. wide. The flap is dissected down to the corneal margin with scissors and then by careful dissection with the blunt pointed knife the flap is carried still further until the dark crescent of the sclero-corneal junction is seen. In this way the outermost layers of the cornea are separated a short distance continuously with the conjunctival flap. The flap is now turned down upon the cornea, and the trephine is started as far forward on the cornea as the flap will admit (at least  $\frac{1}{2}$  mm.), being careful in turning the trephine to keep it at right angles to the

eyeball. The tendency of all operators is to cut through first on the side nearest to them. As soon as the sclera is cut through the aqueous wells up and often with it a bulging of the iris into the wound occurs; this is cut off, making a limbal iridectomy. The tag of sclera is removed with fine forceps and care must be taken not to let this tag fall or be pushed into the anterior chamber as has happened in a number of cases. The flap is now replaced and retained by one or two sutures.

My experience with this operation is limited to two cases: Case 1.—Mr. C. B., age 67, was first seen by me in September, 1912, giving a history of repeated attacks of pain for several years. When I saw him the eyeball was red and painful, the anterior chamber very shallow, the pupil about 4 mm. in diameter, the lens opaque and the T plus 2 with no perception of light. Eserin, first in weak solution, and then in stronger, up to 1 per cent. were used without effect in contracting the pupil or in reducing the tension. As in my experience little or no benefit is to be derived from iridectomy when eserin does not contract the pupil I decided to trephine the sclera. The operation was done November 14, 1912. With the removal of the tag of sclera there was a gush of aqueous, but no prolapse of iris. I then replaced the flap and secured with two sutures. Three months after the operation the patient returned for examination. There had been no return of pain and the tension was normal.

Case 2.—Mrs. J. G., age 54, consulted me September 26, 1912, on account of defective sight of the right eye. V. R. 15/100; L. 5/4. A fundus examination of the right eye showed detachment of the retina above, below and to the temporal side. She was kept in bed for two weeks with the eyes tightly bandaged, but as this treatment had no effect on the detachment she went home. March 10, 1913, she returned with a history of severe neuralgic pain in and about the right eye of five days' standing. The eyeball was intensely injected, the cornea steamy, the anterior chamber almost obliterated, the pupil semi-dilated, the lens opaque, no light perception and the tension plus 2. As in case number 1 eserin failed to contract the pupil or reduce tension. I trephined the sclera on March 14th. After the tag of sclera was removed I was surprised at not seeing a gush of aqueous and a reduction of tension. So I introduced the delicate forceps into the anterior chamber and tried to draw out a portion of the iris, but it was evidently glued fast and would not come. I then made pressure on the globes until a large bead of vitreous welled up into the

wound, when the tension was reduced to normal. The conjunctival flap was secured in its normal position and when I examined the patient sixteen days later the tension still remained normal and the patient was free from pain.

#### DISCUSSION.

Dr. Charles: When the literature on trephining first appeared, it appealed to me because of my experience with a case which I reported to this section in 1909 of "Scleritis with Perforation and Formation of a Conjunctival Cyst." A negro woman was admitted to the Female Hospital, giving a history of rheumatic pains and ocular discomforts for a long time. There had also been present a lump above and to the inner side of the cornea. The eye exhibited a hypopyon ulcer, iritis, ciliary tenderness ( $V =$  digits at one foot), a large subconjunctival "cyst" upper and inner quadrant. Pupil excluded. After dilatation with atropia the subconjunctival fluid disappeared, leaving visible a large round hole in the sclera over the ciliary region which was fully 3 mm. in diameter and so clean-cut as to look as if the sclera had been trephined. When the nurses forgot the atropia and the pupil again closed, the "cyst" reformed. The case convinced me that since it was possible to maintain an open communication between the interior of the eye and the subconjunctiva, the plan was feasible to establish drainage at the filtration angle.

Dr. Loeb: I would like to ask the doctor if he remembers the condition of the retina in that last case, whether it was still detached?

Dr. Luedde: I have a set of Meyrowitz trephines. They have a small handle to be used for regulation of the pressure and lessening the tendency to cut through unequally. I think this operation may be helpful. It would be more accurate for purposes of record and comparison to have taken the tension in these cases with a standard tonometer. The old method of indicating tension as normal, plus 2, etc., is so much a matter of personal interpretation that it lacks scientific accuracy.



## ROYAL SOCIETY OF MEDICINE.

## SECTION OF OPHTHALMOLOGY.

Clinical Meeting, Wednesday, May 7, 1913.

Sir Anderson Critchett, Bt., C.V.O., President, in the Chair.

Mr. N. Bishop Harman showed a case of exenteration of the orbit with partial excision of the maxilla and ethmoid for rodent ulcer. The woman had first seen the rodent seventeen years ago, and she treated it herself with caustics. It frequently recurred, and nine years later was as large as a farthing. She then had x-rays at every recurrence for four years. Next, zinc ions were used; followed by radium for nine months. When sent to him for operation, the ulcer was as large as a penny and was fixed to the bone. Ultimately, an extensive operation had to be performed, for the growth was found to have extended into the orbit and the bony walls. Mr. Harman said none of the newer measures for the treatment of rodent ulcer could compare with the knife for certainty and security, and the knife was infinitely less costly than any other method. Had this growth been excised in the first instance, the woman would have escaped the necessity for this severe operation, and would have preserved to herself two sound eyes.

Mr. Harman also showed drawings of a case of extreme hyperphoria, for which he had operated by his new method of subconjunctival reefing. The patient, a woman aged 28, had been a martyr to severe headaches since school days, and could obtain no relief from them. Examination of the eyes revealed hyperphoria, or latent vertical squint, requiring a 15 degree prism to correct. It was impractical to wear such a high degree prism. Concluding from other signs in the case that the left superior rectus was at fault, he operated, shortening that tendon by his new method. She had now orthophoria to every test, and the headaches had completely ceased. Seven months had elapsed since the operation, and the result was perfect in every way.

Mr. Edgar Chatterton showed a case of tubercular iritis in both eyes. The boy noticed that his sight was bad when at school thirteen months ago. He had never had pain, and there was no history of tubercle or syphilis. Two months ago he had yellow vascular nodules in both irides, at the angle of the anterior chamber, posterior synechiæ, keratitis punctata, and vitreous

opacities. He was now having tuberculin injections, 1/1000 of a mg. once a week, and frequent tapplings of the aqueous. The condition had improved on that treatment.

Mr. Sydney Stephenson showed a case of ocular torticollis in a boy aged 13½. At three months of age, when recovering from whooping cough, he held his head towards the left shoulder, and that habit had persisted. While he was in the wry-neck posture there was no squint nor diplopia. But when he straightened his head the right eye turned upwards and outwards, and vertical and contortional diplopia developed.

Mr. G. H. Pooley and Mr. Harold Grimsdale showed cases of angioma of retina, and Mr. Pooley also exhibited a case of giant-celled sarcoma, in which there had been several operations for recurrences, the last in November, 1911, since which there had been no further appearance of the disease. The President commented on the present procedures as a great advance on the days of removal followed by the application of caustic zinc paste to the remaining surface of the wound.

Mr. H. Herbert showed a case of third nerve paralysis with rhythmic clonic spasm. In this case no divergence was to be seen, but there was the same absence of strabismus as in congenital paralysis of the sixth nerve. The synchronous raising of the lid to the normal extent was due to spasm of the unstriped levator muscle, which was innervated by the sympathetic.

Mr. H. J. Fisher exhibited a case showing arterio-venous communication in the cavernous sinus, successfully treated by ligation of the common carotid. Mr. Elmore Brewerton, discussing the case, pointed out the reason why the internal carotid should be tied in preference to the common carotid, and said he thought that measure would be followed by more cures, and less cerebral complications.

Mr. Ernest Clarke presented a case showing an unusual arrangement of opaque nerve fibres. The patient was a myopic youth aged 20. There was a peculiar ring round the disc, bulging forward, giving to the disc a crater-like appearance. Opaque nerve fibres spread from all parts, and partly involved the macula.

Mr. R. Cruise showed three instances of trephining combined with insertion of thread in glaucoma, the object of this being to increase the area after trephining. The aqueous filtered along the course of the thread, and did not cause inconvenience. He explained that the procedure was on its trial. The President said one of the cases shown he sent to Mr. Cruise for treatment,

expecting that enucleation would have to be performed, but from a tension of +3 the tension was now reduced to normal or even subnormal, and the pain had gone.

Mr. Richardson Cross (Bristol) showed a pigmented growth of the conjunctiva. The general impression was that free excision followed by the galvano-cautery to the residue should be done.

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The Ordinary Meeting of the Section was held on Wednesday, June 4, under the presidency of Sir Anderson Crichtett, Bart., C.V.O.

Mr. Cole Marshall showed a case of uncommon type of cataract in a child. Mr. Bishop Harman brought forward a case of melanotic growth, which seemed to originate in the iris. Mr. Jessop inclined to the view that it sprang from the ciliary body, and pushed the iris on one side, causing flattening of the edge of the pupil. He agreed that it was a melanotic sarcoma. Mr. Treacher Collins mentioned a case of melanoma of the iris, malignant characters having arisen later. He agreed with Mr. Jessop that in the present case the origin of the growth was probably the ciliary body. A possibility in Mr. Harman's case was that it was a cyst, such as Mr. Coats described, with agglutination of the ciliary processes.

Mr. Bishop Harman also showed a case of spontaneous recovery from detachment of the retina. The patient had had complete detachment for three months, and during it she was in bed three times; she refused operation. Shortly after that date the sight suddenly came back, and now there was no trace of any detachment; all that could be seen were one or two cobwebby lines in the disc. She had 6/36 one-letter vision. She had 10 D of myopia, but there had been no accident of any kind. She was a cook in a good family, and one February night she walked out from a hot room to the cold air, and her description was that something black suddenly fell over her eye, and she could not see anything more with it.

Mr. Goudie described the case of a child which came to the Glasgow Eye Infirmary with detached retina, and in whom three months later the retina became re-attached. Two months afterwards it again became detached, only to again become attached. There was fair vision, and no iritis.

Mr. Rayner Batten said he had a case with nearly 20 degrees

of myopia and detachment. Detachment occurred also in the other eye, and the patient was so blind for a year or two that she had to be led about. Later she came and said she saw a glimmer of light, and from that date her sight began to return; she accepted her lenses again, and was able to find her way about. He believed her vision was 6/24.

Mr. Herbert Parsons said he, like others, was sceptical about spontaneous recovery from detachment being possible, until he had a case which altered his view. It occurred in hospital, and though a little later the patient was very carefully examined, no trace of the detachment could be detected, not even streaks to mark what had occurred. Eighteen months later, however, he came with a relapse.

Mr. Macnab described a case of double detachment which underwent spontaneous cure. In another case in which the condition occurred there had been irido-cyclitis, and he believed it was due to tubercle of the eye; there was a large vitreous opacity, and very extensive detachment; the eye was very soft, being practically devoid of tension; the cornea could be seen to be dull and crinkled. Vision was reduced to mere perception of light. He gave tuberculin, and a vaccine cultivated from the patient's own coli bacilli. For four months now the tension had been normal, and the patient could count fingers at five or six metres.

Mr. Jessop reminded the meeting that when the Ophthalmological Society discussed the subject, only one case was reported as having been cured, and that was spoken to by Mr. Nettleship and Sir John Tweedy. Many cases of cure of the condition had been reported, but they had not been lasting.

Mr. Ormond did not share Mr. Jessop's scepticism, and described a case of his own, in a patient who had been treated by glasses for high myopia, and a little later she said her vision suddenly went in one eye. She had obvious detachment of the outer side of the retina. He did a sclero-puncture, and removed some fluid, and in three days the detachment had disappeared. He had seen her a number of times since, and the detachment remained absolute. Vision was 6/36.

Mr. Leslie Paton reminded the meeting that Mr. Harman's case was one of spontaneous re-attachment, not after operation. He was more optimistic than Mr. Jessop on the subject. He had seen a case of thirty-five years' standing cured after operation, though it was a double case. In another case, that of a lady with 15D of myopia, and vision 6/18 in either eye, there was detach-

ment in one eye, resulting in blindness, and that was followed by detachment in the other eye. After operation her vision was better than before the detachment. In the case of a girl with detachment, she was put on her back and treated with mercury and iodide, and in three months the retina had become re-attached, leaving only a curious distribution of retinal pigment. In a series of twenty-eight cases of detachment which he had looked up, seven were cured.

Mr. Nettleship and Mr. Jessop suggested that in the near future a further discussion on the subject should be held by the Section. Mr. Nettleship said he had records in his case-books of several cases of detachment which had recovered.

Mr. Cunningham showed a case of nystagmus with uniocular fixation.

Professor Worthington, F.R.S., gave a contribution and demonstration on "An experimental study of normal monocular polyopia."

Mr. G. H. Pooley read notes of a case of cyst of the iris.

Mr. Goudie described a case of corneal ulceration, the discharge from which contained fusiform bacilli and spirilla resembling those found in Vincent's angina.

Dr. Freeland Fergus presented a communication entitled "Glaucoma associated with venous congestion."

Mr. Bishop Harman submitted a paper on the education of high myopes, the experience of four years. It was an account of the working of a scheme for the safe education of children with such a degree of myopia that they were not fit for the ordinary school curriculum, yet were not bad enough to require the teaching for the blind. In any scheme of compulsory education, there must be provision for misfits, and for none was this more necessary than for high myopes, who often had great intelligence and hence were in danger of damaging their delicate eyes by over-application. He explained the method of selection of cases and their transfer to centres for special instruction. The curriculum fell into three parts: (1) oral, the children being associated with scholars of the ordinary school for subjects which could be taught orally. (2) Literary work, which was learned not by books, pens, or paper, but by blackboard and chalk, the writing to be done free-arm fashion. (3) A full use of the handicrafts which would develop attention and concentration with a minimum use of the eyes. His conclusion was that a suitable system of teaching myopes could be arranged and satisfactorily carried



out. Such classes should not be independent units, nor be associated with existing blind-schools, but should be integral parts of existing elementary schools. Their success depended almost wholly on the intelligence and initiative of the teachers, who were required to do real teaching. The training of these children should be general, not merely technical. The classes should be of small size, with an optimum number of a dozen per teacher, and there should be a standard of visual acuity of 6/18 with suitable glasses. The children should also be under regular medical supervision during the whole of their school life.

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AMERICAN ACADEMY OF OPHTHALMOLOGY AND  
OTO-LARYNGOLOGY.

Preliminary Announcement of the Eighteenth Annual Meeting.

Hotel Patten, Chattanooga, Tennessee, Monday, Tuesday and Wednesday, October 27, 28, 29, 1913.

Headquarters and Meetings will be held at Hotel Patten, Chattanooga, Tenn. Hotel reservation may be made through the Secretary, or from Hotel Patten.

Officers.—Dr. John W. Murphy, President, Cincinnati, Ohio; Dr. J. O. McReynolds, First Vice-President, Dallas, Texas; Dr. Perry Goldsmith, Second Vice-President, Toronto, Canada; Dr. J. E. Brown, Third Vice-President, Columbus, Ohio; Dr. Secord H. Large, Treasurer, Cleveland, Ohio; Dr. Lee Masten Francis, Secretary, Buffalo, N. Y.

OPHTHALMOLOGY.

Lieut.-Col. R. H. Elliott, Madras, India—"Oration in Ophthalmology."

Dr. Harry S. Gradle, Chicago, Ill.—"Some Anomalies of the Retinal Pigment Epithelium," being a posthumous paper by Dr. H. Gradle.

Dr. George Keiper, Lafayette, Ind.—"A Further Contribution on Parinaud's Conjunctivitis with Report of Two New Cases."

Dr. C. F. Adams, Trenton, N. J.—"Adenoids as a Factor in Amblyopia."

Dr. C. C. Stuart, Cleveland, Ohio—"Case Report of a Peculiar Lesion of the Retina of the Eye."

Dr. John Green, Jr., St. Louis, Mo.—"Retraction Movements of the Eye; Acquired and Congenital."

Dr. Wendell Reber, Philadelphia, Pa.—“The Elliott Trephining Operation for Glaucoma.”

Dr. David Crawford, Guthrie Center, Ia.—“Bi-focals: Who Should Wear Them and Essentials of Success in Fitting.”

Dr. J. M. Patton, Omaha, Neb.—“Ocular Symptoms Associated with Oxycephalus or Tower-Skull.”

Dr. Nils Remmen, Chicago, Ill.—“Twenty Sclerotomies for Glaucoma.”

Dr. F. P. Calhoun, Atlanta, Ga.—“Bilateral Coloboma of the Lens, Complicated with Senile Cataract Operation.”

Dr. C. D. Wescott, Chicago, Ill.—A Case of Granuloma of the Lid with Specimen.

Dr. Walter Lancaster, Boston, Mass.—“Truths and Errors about the Effects on the Eyes of Working with Artificial Illumination.”

Dr. Allen Greenwood, Boston, Mass.—“Evisceration, Glass or Gold Ball Implantation. A Plea for its More General Adoption.”

Dr. Robert Scott Lamb, Washington, D. C.—“The Use of Pilocarpin and Eserin in the Diseases of the Eye.”

Dr. Will Walter, Chicago, Ill.—“Some Scientific Aspects of Inoculation Therapy.”

Dr. F. Park Lewis, Buffalo, N. Y.—“Psychic Disturbances Involving the Eye.”

Dr. Percy Fridenberg, New York City—“The Conjunctival Flap in Ophthalmic Surgery. A New Procedure.”

Dr. S. Lewis Ziegler, Philadelphia, Pa.—“Operative Technic of Ophthalmic Surgery.”

Dr. C. B. Wylie, Morgantown, W. Va.—“Physiologic and Pathologic Relations of the Eye and Accessory Sinuses of the Nose.”

Dr. G. Sterling Ryerson, Toronto, Canada—Subject to be announced.

Dr. E. C. Ellett, Memphis, Tenn.—Subject to be announced.

EAR.

Dr. George R. West, Chattanooga, Tenn.—Oration—“Pelvic Reflexes.”

Symposium of the Mastoid; “Recent Advances in Surgery of the Mastoid.”

Dr. Gerhard H. Cocks, New York City—“Indications for Operation in Acute Mastoiditis, with Special Reference to Radiography and Bacterial Findings.” (By invitation.)

Dr. R. Johnson Held, New York City—"Discussion of Methods of Treating the Wound Cavity to Procure the Best Results."

Dr. J. Clarence Sharp, New York City—"When is the Performance of the Radical Mastoid Operation Imperatively Indicated?" (By invitation.)

Dr. Carl Fisher, Rochester, Minn.—"Epitheliomata of the External Ear."

Drs. Jos. C. Beck, Dr. Wm. L. Ballenger and Dr. J. R. Fletcher, Chicago, Ill.—"Symposium on Labyrinth."

Dr. E. R. Lewis, Dubuque, Iowa—"Physiology of Vestibulation."

#### NOSE.

Dr. Perry Reaves, Greensboro, N. C.—"Nasal Surgery with New Instruments."

Dr. Wolfe Freudenthal, New York City—"Further Observations and Experiences with Suspension Laryngoscopy."

Dr. Seymour Oppenheimer, New York City—"Accessory Nasal Sinuses in Children."

Dr. J. A. Stuckey, Lexington, Ky.—"Sinus Diseases."

Dr. Emil Mayer, New York City—"Nasal Dysmenorrhea."

Dr. Myron Metzenbaum, Cleveland, Ohio—"Exenteration of Middle Turbinates for the Radical Cure of Empyema of Frontal Sinus, 35 Cases, Illustrated by Lantern."

Dr. Kate Baldwin, Philadelphia, Pa.—"The Violet Ray in Throat, Nose and Ear Conditions."

Dr. Sidney Yankauer, New York City—"A Demonstration on the Manikin and on the Cadaver, of the Intra-nasal Operation on the Lachrymal Apparatus."

Dr. W. E. Sauer, St. Louis, Mo.—"The Endonasal Route of Attack in Hypophyseal Tumor Cases."

Dr. John E. Brown, Columbus, Ohio—"Two Cases of Extensive Fibro-Myxoma of the Naso-Pharynx."

Dr. Samuel Iglauer, Cincinnati, O.—"On the Use of Electro-Magnets in the Extraction of Metallic Bodies from the Air Passages."

#### THROAT.

Dr. Will Haskins, New York City—"Nerves of the Nasal Passages and Throat." (By invitation.)

Dr. J. H. Johnson, Coffeyville, Kan.—"Reflexes from Elongated Uvula."

Dr. Gaylord Hall, Louisville, Ky.—"Chronic Peritonsillar Abscess."

Dr. Richard Lewisohn, New York City—"The Uses of a New Oesophagoscope."

Dr. Chevalier Jackson, Pittsburgh, Pa.—"Intratracheal Insufflation Anæsthesia for the Rhino-Laryngologist."

Dr. L. B. Lockhard, Denver, Colo.—"The Electric Cautery in the Treatment of Tuberculous Lesions of the Throat."

Dr. W. Scheppegegrell, New Orleans, La.—"Epipharyngeal Diphtheria and its Relation to Epidemics of Diphtheria."

Dr. H. Moulton, Fort Smith, Ark.—"A Large Cystic Tumor of the Epiglottis."

Dr. Geo. A. Webster, Boston, Mass.—"Atropia in the Treatment of Acute Rhinitis."

Council.—Dr. John W. Murphy, Cincinnati, Ohio; Dr. J. O. McReynolds, Dallas, Texas; Dr. George F. Suker, Chicago, Ill.; Dr. J. J. Kyle, Los Angeles, Cal.; Dr. Emil Mayer, New York City; Dr. J. M. Ray, Louisville, Ky.; Dr. Percy Fridenberg, New York City; Dr. F. P. Calhoun, Atlanta, Ga.

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## ABSTRACTS FROM MEDICAL LITERATURE.

BY J. F. SHOEMAKER, M.D.,  
ST. LOUIS, MO.

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### A FURTHER CONTRIBUTION TO THE STUDY OF DISEASES OF THE ACCESSORY SINUSES IN RE- LATION TO DISEASES OF THE EYE, AND THE SURGICAL METHODS TO BE ADOPTED FOR THEIR RELIEF.

J. H. Bryan (*Surgery, Gynecology and Obstetrics*, June, 1912) discusses this subject, reporting a number of cases of sinus disease with ocular complications, and states in conclusion:

"First, in my experience, the majority of severe inflammations of the sinuses are accompanied by more or less disturbances in the eye, these disturbances varying in intensity according to the severity of the sinus disease, and the reason they are not more frequently recognized is that they are not looked for until the eye manifestations are self-evident.

"Second. The change in the visual fields is a significant symptom of sinus inflammation, and is generally associated with dis-

ease in the anterior cavities, but is also frequently found in disease of the posterior sinuses.

"Third. Congestion of the papilla is an early sign of disease in the posterior sinuses.

"Fourth. A scotoma and enlargement of the blind spots are so frequently found in posterior sinuses inflammation as to make them almost pathognomonic.

"Fifth. There is no one operation that is suitable to all cases. The more conservative methods have relieved many serious cases, and if the conditions justify it the intranasal methods should be tried first. Failing to bring about relief in this way, then one of the more radical measures will have to be adopted; and the operation that offers the best chance of reaching thoroughly all the diseased parts of the frontal, ethmoidal and sphenoidal cavities is the Killian, and in maxillary sinus complications a combination of the Killian with the Caldwell-Sue operation."

#### MYOPIA PREVENTION BY TEACHERS.

W. H. Bates (*N. Y. Med. Jour.*, August 30, 1913) states that "myopia with elongation of the eyeball is incurable. It is usually acquired during school life. Acute myopia, spasm of the accommodation, or functional myopia is an early stage of incurable myopia. The cause of myopia is an effort to see distant objects." In corroboration of these statements he says: "1. Myopic refraction has always been produced in man and the lower animals when regarding unfamiliar distant objects which require an effort. 2. Myopia was prevented in the public schools of Grand Forks, N. D., for eight years by methods which prevented an effort to see distant objects. 3. Myopia was always benefited by treatment suggested by the cause. 4. The cause suggested a method for the experimental production of myopia in dogs, rabbits and cats. 5. Physicians, teachers, and others interested have investigated and confirmed these facts. 6. It should be emphasized that there is but *one* cause of myopia, an effort to see distant objects. There is no other."

Bates believes the cure for functional myopia, and therefore the prevention of axial myopia, is to have the children look at familiar distant objects. He finds the Snellen test card excellent for this purpose. The letters should be memorized and looked at each day for a short time. The results of the use of



this method in a number of the public schools of New York City are given and the author thinks they are most encouraging, over 1,000 pupils with defective sight obtaining normal vision in both eyes.

### SARCOMA OF THE CHORIOID.

#### A CASE WITH METASTASIS TO THE LIVER EIGHT YEARS AFTER ENUCLEATION OF THE EYE.

Aaron Brav (*Jour. A. M. A.*, August 30, 1913) reports the case of a young woman aged 18 years, in whom the vision of the left eye was reduced to light perception. The diagnosis of detachment of the retina with probably a tumor of the chorioid was made and enucleation advised. This was refused for four months, by which time there was much pain in the eye, tension plus 3, and the eye was badly inflamed. Then after repeated warning as to the danger to life she consented to enucleation. This was done and a pigmented tumor the size of a hazelnut was found in the eye. Microscopic examination proved it to be a melanotic sarcoma. There was no local recurrence of the trouble. However, eight years later the patient died of malignant growth of the liver. The case emphasizes the necessity of an early diagnosis and prompt removal of the eye in such cases, as it shows that in sarcoma of the chorioid metastasis with a fatal termination may occur any time after the eye has been enucleated, even if the tumor does not recur locally.

### TREATMENT OF ACUTE DACRYOCYSTITIS.

F. H. Verhoeff (*Jour. A. M. A.*, March 8, 1913), following the suggestion of Agnew, opens a lacrimal abscess by cutting down into the sac between the caruncle and the inner commissure of the eyelids. This he contends, not only secures better drainage than by opening through the skin over the abscess, but avoids also the danger of a permanent fistula. Agnew used a Beer's knife but Verhoeff finds an angular keratome more satisfactory, there being less danger of injuring the cornea. He usually makes the incision under a general anæsthetic and immediately afterwards passes a large size probe through the wound and down through the duct. He finds it unnecessary to wash out the sac but every other day passes a probe under cocain anæsthesia. No hot or cold applications are made but the pus is kept washed out of the conjunctival sac with a boric acid lotion. His results with this treatment have been very satisfactory.

### OCULAR DISEASES OCCURRING IN ASSOCIATION WITH DIABETES MELLITUS.

D. Matheson Mackey (*Practitioner*, May, 1913) mentions the following condition of the eyes, apparently caused by an associated diabetes: 1. Abnormal refraction and accommodation. Hypermetropia or myopia may develop, generally being temporary and often clearing up in several months or less. Subnormal accommodation or complete loss of accommodation result from the effect of the disease on the ciliary muscles. 2. Changes in the lens, either cataract, or "second sight" due to myopia caused by swelling of the lens. Diabetic cataract is the only form of non-traumatic cataract that is likely to clear up spontaneously. 3. Changes in the retina, diabetic retinitis. 4. Toxic amblyopia, where the papillo-macular bundle of fibres in the optic nerve is injured by toxic substances resulting from faulty metabolism, similar to the toxic amblyopia caused by alcohol and tobacco. 5. Visual faults due to cerebral lesions. 6. Paralysis of the extrinsic ocular muscles.

### CONCERNING THE USE OF TUBERCULIN IN OPHTHALMOLOGY.

(With Report of Cases.)

W. B. Weidler (*Manhattan Eye, Ear and Throat Hospital Reports*, February, 1913), from his observations with the use of tuberculin, offers the following conclusions:

1. The Von Pirquet cutaneous reaction is quite certain in the young and fairly so in the adult, or those over 17 years of age.

2. In the treatment of keratitis or affections of the cornea, with the Von Pirquet positive, the injections of tuberculin never failed to cure the condition.

3. In the case of tubercle of the choroid where the reaction was positive, injections of tuberculin were of undoubted value, as it restored the vision from 5/200 to 20/20, and in the case of uveitis it brought the vision from 20/70 to 20/30. In both of these cases no other general medication was allowed, nor was it permitted in any of our cases reported in the paper.

4. The evidence collected from this brief study has been such as to make us believe that tuberculin therapy should always be used where there is the slightest suspicion of tubercular manifestation old or recent. We would also urge the more general use of tuberculin in the ophthalmic practice of medicine.

GONORRHOEAL CONJUNCTIVITIS ABORTED BY A  
TWO PER CENT. SOLUTION OF SILVER  
NITRATE.

J. Herbert Claibourne (*N. Y. State Jour. of Med.*, April, 1913), after first wiping the secretion from the conjunctiva of the everted lids with gauze, fills the whole conjunctival sac with a two per cent. solution of silver nitrate, allowing it to remain thirty seconds, and then wiping it away with gauze. The lids immediately become very red and begin to swell. Atropin is then ordered and a 1 to 3000 mercury bichloride solution used every two hours together with constant ice application. This treatment generally controls the condition in less than twenty-four hours, but is only applicable for the abortion of the disease in the early stages of the infection.

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SCHOOL FOR HEALTH OFFICERS,

CONDUCTED BY HARVARD UNIVERSITY AND THE MASSACHUSETTS  
INSTITUTE OF TECHNOLOGY.

Beginning this fall Harvard University and the Massachusetts Institute of Technology are to maintain in co-operation a School for Public Health Officers. The facilities of both institutions are to be available to students in the School and the Certificate of Public Health (C. P. H.) is to be signed by both President Lowell and President Maclaurin.

The object of this School is to prepare young men for public health work, especially, to fit them to occupy administrative and executive positions such as health officers or members of boards of health, as well as secretaries, agents, and inspectors of health organizations.

It is recognized that the requirements for public health service are broad and complicated, and that the country needs leaders in every community, fitted to guide and instruct the people on all questions relating to the public health. To this end, the instruction of the new School will be on the broadest lines. It will be given by lectures, laboratory work, and other forms of instruction offered by both institutions, and also by special instructors from national, state, and local health agencies.

The requirements for admission are such that graduates of colleges, or technical and scientific schools, who have received adequate instruction in Physics, Chemistry, Biology, and French

or German, may be admitted to the School. The medical degree is not in any way a pre-requisite for admission, although the Administrative Board strongly urges men who intend to specialize in public health work to take the degree of M.D. before they become members of the School for Health Officers.

The Administrative Board which will conduct the new School is composed of Professor William T. Sedgwick, of the Massachusetts Institute of Technology; Professor Milton J. Rosenau, of Harvard; and Professor George C. Whipple, of Harvard. Professor Rosenau, of Harvard, has the title of Director, and the work of the School will be under his immediate supervision.

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## BOOK REVIEWS.

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JULIUS HIRSCHBERG'S AUSGEWAHLTE ABHANDLUNGEN, 1868 TO 1912. Zu Seinem siebenzigsten Geburtstage Ihm ueberreicht im Namen Seiner Schueler, von Oscar Fehr and Wilhelm Muehsam. Leipzig, Veit & Co., 1913. Price \$7.20. (Julius Hirschberg's selected articles, 1868 to 1912. On his seventieth birthday presented to him in the name of his pupils, by Oscar Fehr and Wilhelm Muehsam.)

Fehr and Muehsam, in republishing in one volume the writings of their beloved teacher, have selected a new form of congratulatory gift, which certainly is an excellent one, and on which they in turn are to be congratulated. Hirschberg's writings cover so long a period of time and so vast a variety of subjects, though mostly of ophthalmic interest, that it is a great boon to have them collected in one volume. May be in this form much which modern writers often seem hardly to be familiar with will thus come to their knowledge.

That the selection was made with the necessary circumspection is the more certain, since Hirschberg himself aided in it.

A portrait showing Hirschberg at his seventieth birthday accompanies the volume, and it is a pleasure to see that age has as yet in no way bent the indefatigable spirit of this great scientist and oculist. May it be given to him to teach by mouth and pen for many a year to come!